

# WATER USE EFFICIENCY AND CONSERVATION RESEARCH ACT

JULY 30, 2008.—Committed to the Committee of the Whole House on the State of  
the Union and ordered to be printed

Mr. GORDON of Tennessee, from the Committee on Science and  
Technology, submitted the following

## R E P O R T

[To accompany H.R. 3957]

[Including cost estimate of the Congressional Budget Office]

The Committee on Science and Technology, to whom was referred the bill (H.R. 3957) to increase research, development, education, and technology transfer activities related to water use efficiency and conservation technologies and practices at the Environmental Protection Agency, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

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## I. AMENDMENT

The amendment is as follows:

Strike all after the enacting clause and insert the following:

### SECTION 1. SHORT TITLE.

This Act may be cited as the “Water Use Efficiency and Conservation Research Act”.

### SEC. 2. FINDINGS.

Congress finds the following:

(1) Between 1950 and 2000, the United States population increased nearly 90 percent. In that same period, public demand for water increased 209 percent. Americans now use an average of 100 gallons of water per person each day. This increased demand has put additional stress on water supplies and distribution systems, threatening both human health and the environment.

(2) Thirty-six States are anticipating local, regional, or statewide water shortages by 2013. In addition, climate change related effects are expected to exacerbate already scarce water resources in many areas of the country.

(3) The Intergovernmental Panel on Climate Change’s 2007 assessment states that water stored in glaciers and snow cover is projected to decline, reducing water availability to one-sixth of the world’s population that relies upon meltwater from major mountain ranges. The Intergovernmental Panel on Climate Change also predicts droughts will become more severe and longer lasting in a number of regions.

(4) Water conservation should be a national goal and the Environmental Protection Agency should work with nongovernmental partners to achieve that goal. The Environmental Protection Agency should support the research, development, and dissemination of technologies and processes that will achieve greater water use efficiency.

(5) WaterSense is a voluntary public-private partnership program established by the Environmental Protection Agency to promote water efficiency by helping consumers identify water-efficient products and practices. The Environmental Protection Agency estimates that if all United States households installed water-efficient appliances, the country would save more than 3,000,000,000,000 gallons of water and more than \$17,000,000,000 per year.

(6) The WaterSense program has developed a network of partners, and therefore can disseminate the results of research on technologies and processes that achieve greater water use efficiency.

### SEC. 3. RESEARCH PROGRAM.

(a) IN GENERAL.—The Assistant Administrator for Research and Development of the Environmental Protection Agency (in this Act referred to as the “Assistant Administrator”) shall establish a research and development program consistent with the plan developed under section 4 that promotes water use efficiency and conservation, including—

- (1) technologies and processes that enable the collection, storage, treatment, and reuse of rainwater, stormwater, and greywater;
- (2) water storage and distribution systems;
- (3) behavioral, social, and economic barriers to achieving greater water use efficiency; and
- (4) use of watershed planning directed toward water quality, conservation, and supply.

(b) CONSIDERATIONS.—In planning and implementing the program, the Assistant Administrator shall consider—

- (1) research needs identified by water resource managers, State and local governments, and other interested parties; and
- (2) technologies and processes likely to achieve the greatest increases in water use efficiency and conservation.

(c) MINORITY SERVING INSTITUTIONS.—In the execution of this program, the Assistant Administrator may award extramural grants to institutions of higher education and shall encourage participation by Minority Serving Institutions.

### SEC. 4. STRATEGIC RESEARCH PLAN.

(a) IN GENERAL.—The Assistant Administrator shall coordinate the development of a strategic research plan (in this Act referred to as the “plan”) for the water use

efficiency and conservation research and development program established in section 3 with all other Environmental Protection Agency research and development strategic plans.

(b) **PLAN CONTENTS.**—The plan shall—

(1) outline research goals and priorities for a water use efficiency and conservation research agenda, including—

(A) developing innovative water supply-enhancing processes and technologies; and

(B) improving existing processes and technologies, including wastewater treatment, desalinization, and groundwater recharge and recovery schemes;

(2) identify current Federal research efforts on water that are directed toward meeting the goals of improving water use efficiency, water conservation, or expanding water supply and describe how such efforts are coordinated with the program established in section 3 in order to leverage resources and avoid duplication; and

(3) consider and utilize, as appropriate, recommendations in reports and studies conducted by Federal agencies, the National Research Council, the National Science and Technology Council, or other entities in the development of the plan.

(c) **SCIENCE ADVISORY BOARD REVIEW.**—The Assistant Administrator shall submit the plan to the Science Advisory Board of the Environmental Protection Agency for review.

(d) **REVISION.**—The plan shall be revised and amended as needed to reflect current scientific findings and national research priorities.

#### **SEC. 5. TECHNOLOGY TRANSFER.**

The Assistant Administrator, building on the results of the activities of the program established under section 3, shall—

(1) facilitate the adoption of technology and processes to promote water use efficiency and conservation; and

(2) collect and disseminate information, including the establishment of a publicly-accessible clearinghouse, on technologies and processes to promote water use efficiency and conservation, including information on—

(A) incentives and impediments to development and commercialization;

(B) best practices; and

(C) anticipated increases in water use efficiency and conservation resulting from the implementation of specific technologies and processes.

#### **SEC. 6. ADVANCED WATER EFFICIENCY DEVELOPMENT PROJECTS.**

(a) **IN GENERAL.**—As part of the program under section 3, the Assistant Administrator shall carry out at least 4 projects under which the funding is provided for the incorporation into a building of the latest water use efficiency and conservation technologies and designs. Funding for each project shall be provided only to cover incremental costs of water-use efficiency and conservation technologies.

(b) **CRITERIA.**—Of the 4 projects described in subsection (a), at least 1 shall be for a residential building and at least 1 shall be for a commercial building.

(c) **PUBLIC AVAILABILITY.**—The designs of buildings with respect to which funding is provided under subsection (a) shall be made available to the public, and such buildings shall be accessible to the public for tours and educational purposes.

#### **SEC. 7. REPORT.**

Not later than 18 months after the date of enactment of this Act, and once every 2 years thereafter, the Assistant Administrator shall transmit to Congress a report which details the progress being made by the Environmental Protection Agency with regard to—

(1) water use efficiency and conservation research projects initiated by the Agency;

(2) development projects initiated by the Agency;

(3) outreach and communication activities conducted by the Agency concerning water use efficiency and conservation; and

(4) development and implementation of the plan.

#### **SEC. 8. WATER MANAGEMENT STUDY AND REPORT.**

(a) **STUDY.**—

(1) **REQUIREMENT.**—The Administrator of the Environmental Protection Agency shall enter into an arrangement with the National Academy of Sciences to complete a study of low impact and soft path strategies for management of water supply, wastewater, and stormwater.

(2) **CONTENTS.**—The study shall—

(A) examine and compare the state of research, technology development, and emerging practices in other developed and developing countries with those in the United States;

(B) identify and evaluate relevant system approaches for comprehensive water management, including the interrelationship of water systems with other major systems such as energy and transportation;

(C) identify priority research and development needs; and

(D) assess implementation needs and barriers.

(b) **REPORT.**—Not later than 2 years after the date of enactment of this Act, the Administrator of the Environmental Protection Agency shall transmit to the Committee on Science and Technology of the House of Representatives and the Committee on Environment and Public Works of the Senate a report on the key findings of the study conducted under subsection (a). The report shall evaluate challenges and opportunities and serve as a practical reference for water managers, planners, developers, scientists, engineers, non-governmental organizations, federal agencies, and regulators by recommending innovative and integrated solutions.

(c) **DEFINITIONS.**—For purposes of this section—

(1) the term “low impact” means a strategy that manages rainfall at the source using uniformly distributed decentralized micro-scale controls to mimic a site’s predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source; and

(2) the term “soft path” means a general framework that encompasses—

(A) increased efficiency of water use;

(B) integration of water supply, wastewater treatment, and stormwater management systems; and

(C) protection, restoration, and effective use of the natural capacities of ecosystems to provide clean water.

(d) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Administrator of the Environmental Protection Agency for carrying out this section \$1,000,000 for fiscal year 2009.

#### **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

There are authorized to be appropriated to the Assistant Administrator for carrying out this Act \$20,000,000 for each of the fiscal years 2009 through 2013.

### **II. PURPOSE OF THE BILL**

The purpose of the H.R. 3957 is to increase research, development, education, and technology transfer activities at the Environmental Protection Agency (EPA) related to water use efficiency and conservation technologies and practices.

### **III. BACKGROUND AND NEED FOR LEGISLATION**

Drought and recent water shortages in several regions of the United States have increased concern about water supply at all levels of government. Since 1950, the United States population has increased nearly 90 percent. In that same period, public demand for water has increased 209 percent. Americans now use an average of 100 gallons of water per person each day, which results in a daily water use of approximately 26 billion gallons of water. This increased demand has put additional stress on water supplies and distribution systems, threatening the environment and constraining economic activity. Thirty six states are anticipating local, regional, or statewide water shortages by 2013. Some states are already in the middle of a severe drought.<sup>1</sup>

Although some water efficiency strategies require an initial capital investment, in the long run, conserving water provides significant cost savings for water and wastewater systems. Water efficiency and re-use programs help systems avoid, downsize, and post-

<sup>1</sup> Governmental Accountability Office. *Fresh Water Supply: States’ Views of How Federal Agencies Could Help Them Meet the Challenges of Expected Shortages*. GAO. July 2003. GAO-03-514.



pone expensive infrastructure projects, by developing new water supplies.

In conjunction with its statutory responsibilities to ensure water quality under the Clean Water Act and the Safe Drinking Water Act, EPA has a program of research and development on water treatment technologies, health effects of water pollutants, security from deliberate contamination, and watershed protection. Current annual funding for these activities is approximately \$50 million. EPA currently has no research and development effort that addresses water supply, water-use efficiency or conservation.

There is also a lack of focused research and development efforts aimed at addressing water-use efficiency and conservation in other agencies of the federal government, especially focused on residential and commercial uses. Because of the Agency's complementary work on water quality, EPA is the logical federal entity to complete this research due to the important relationship between water supply and water quality.

In May, EPA's Science Advisory Board (SAB) released their annual report on the Agency's budget proposal for Research and Development for FY 2009.<sup>2</sup> In the SAB's Report, the SAB recommended that, "in light of changing socio-economic pressures and the growing stresses that will result from climate change (reduced snow pack, more intermittent precipitation and stream flows, more frequent drought, etc.), expand the analysis of water infrastructures, supply, demand and quality".<sup>3</sup>

#### IV. HEARING SUMMARY

The Subcommittee on Energy and Environment held a hearing on Tuesday, October 30, 2007 to receive testimony on H.R. 3957, *The Water Use Efficiency and Conservation Research Act* (and also H.R. 2339, *The Produced Water Utilization Act*) from the following witnesses:

- Dr. Glen Daigger, Vice President at CH2MHill.
- Mr. Ed Clerico, CEO of Alliance Environmental and Designer at the Solaire Project in New York City.
- Ms. Val Little, Director of the Water Conservation Alliance of Southern Arizona and Principal Research Specialist at the University of Arizona's College of Architecture and Landscape Architecture.
- Mr. Ron Thompson, District Manager of the Washington County Water Conservancy District.
- Mr. John Veil, Senior Scientist at Argonne National Laboratory.

Chairman Nick Lampson (D-TX) opened the hearing by discussing the need for water conservation and efficiency, particularly in drought ridden areas. Ranking Member Bob Inglis (R-SC) agreed and indicated his intention to ask the Environmental Protection Agency to comment on H.R. 3957.

Mr. Daigger stated that with increased population growth and urbanization, transporting clean, safe water is no longer effective or even necessary. Instead, municipalities can treat reclaimed

<sup>2</sup> U.S. Environmental Protection Agency, Science Advisory Board. 2008. *Comments on EPA's Research Budget for Fiscal Year 2009: A Report of the Environmental Protection Agency (EPA) Science Advisory Board (SAB)*. EPA-SAB-08-008. May 12, 2008. 35 pp.

<sup>3</sup> Ibid. p. 4 and 5.

water at site with membranes, advanced oxidation and ultra-violet light. While these technologies are available now, Mr. Daigger urged Congress to support efforts to deliver these technologies more quickly and to authorize demonstration programs.

Mr. Thompson discussed the importance of water conservation in the desert in Utah and felt that this was accomplished through adoption of technologies, such as low-flow appliances and fixtures and by educating the public.

Mr. Clerico testified on the importance of innovative technology for water conservation. He cited several large scale facilities, like the New England Patriots football stadium, where innovative design and equipment reduced water usage, and he emphasized the importance of research to accomplish these goals.

Ms. Little emphasized the importance of including the views of the over 200 partners of the WaterSense Program in the effort to prioritize the areas of applied research in water conservation. She believes that sound decision making requires policy makers to know which demographics have the highest potential for increased water use efficiency. She also felt grey water offered a great deal of potential savings in water supplies and that all water use should be metered in the nation. Ms. Little also stressed there were limits to what could be achieved in water conservation through adoption of technology alone. She indicated that human behavior is also an important factor that must be considered if we are to achieve water conservation goals.

Dr. Daigger testified to the importance of demonstrations as a part of this program stating, “demonstrations can pull several elements together to see how an integrated system can function at a much higher level.” Several other witnesses echoed his comments on the need for such projects in the bill. Mr. Clerico, the designer of the Solaire Project in NYC, responded to a question raised about the need for a federal role in this area. He argued that many water technologies face a “confidence barrier” which would be crucial in speeding up public acceptance of certain water efficiency technologies.

On the subject of funding, witnesses gave a range for what would be appropriate. They discussed the fact that Singapore is investing \$330 million in new research on water technologies for only 4.5 million people. Dr. Daigger recommended a budget of \$100 million a year as an optimal level for the program.

#### V. COMMITTEE ACTIONS

On October 24, 2007, Rep. Jim Matheson introduced H.R. 3957, *The Water Use Efficiency and Conservation Research Act* which was referred to the Committee on Science and Technology.

In the 110th Congress the Subcommittee on Energy and Environment met to consider H.R. 3957 on May 6, 2008.

Mr. Baird moved that the Subcommittee favorably report the bill, H.R. 3957, to the Full Committee on Science and Technology. The motion was agreed to by a voice vote.

The Committee on Science and Technology met to consider H.R. 3957 on July 16, 2008. The Committee considered the following amendments:

Mr. Matheson offered a manager’s amendment to make technical corrections to the bill, to add a new Section to the bill to require

the Administrator to carry out projects to incorporate water use efficiency and conservation technologies and designs into buildings to demonstrate their feasibility, and to authorize \$20 million per year for the programs required under the Act for the five-year period beginning in fiscal year 2009.

*The amendment was adopted by voice vote.*

Ms. Johnson offered an amendment to establish a publicly-accessible clearinghouse of information on technologies and processes to promote water use efficiency and conservation; to include watershed water efficiency planning as a component of the research program; and to allow the Assistant Administrator to allocate extramural grants to institutions of higher education, including Minority Serving Institutions.

*The amendment was adopted by voice vote.*

Mr. Gingrey offered an amendment to require EPA to create a strategic plan for the water use efficiency and conservation research program.

*The amendment was adopted by voice vote.*

Ms. Giffords offered an amendment to direct EPA to enter into an agreement with the National Academy of Science to produce a report on water strategies for the management of water supply, wastewater, and stormwater.

*The amendment was adopted by voice vote.*

H.R. 3957, as amended, was agreed to by a voice vote.

Mr. Matheson moved that the Committee favorably report the bill, H.R. 3957 to the House, as amended. The motion was agreed to by a voice vote.

#### VI. SUMMARY OF MAJOR PROVISIONS OF THE BILL, AS REPORTED

H.R. 3957 establishes a research and development program within the Environmental Protection Agency's Office of Research and Development (ORD) to promote water use efficiency and conservation. The research program includes the development of technologies and processes to expand water supplies through storage, treatment, and reuse of rainwater, stormwater, and greywater; research on water storage and distribution systems; research on behavioral, social, and economic barriers to achieving greater water efficiency; and research on the use of watershed planning.

The Administrator is directed to consult with stakeholders in developing the research agenda and to give priority to research and development projects that are likely to achieve the greatest water conservation benefits. The Assistant Administrator may award extramural grants in order to meet the goals of the program and is directed to encourage participation by Minority Serving Institutions.

The act requires EPA to develop a strategic research plan to guide the program established in the bill. EPA's Science Advisory Board is required to review the plan and the program is required to be consistent with the plan.

H.R. 3957 requires the Assistant Administrator of the Office of Research and Development to facilitate the adoption of technology and processes to increase water efficiency and conservation and to provide information on technologies and processes that achieve these goals. In addition, the bill will collect information on technologies and processes that achieve greater water use efficiency

and conservation and disseminate this information through a public clearinghouse.

The legislation directs the Administrator to conduct advanced water efficiency development projects to demonstrate the application of advanced water efficiency designs and technologies in buildings. The Administrator is directed to conduct at least four projects. EPA will provide funding only to cover the incremental costs of adding water-use efficiency and conservation technologies to the buildings.

H.R. 3957 requires EPA to enter into an arrangement with the National Academy of Sciences to complete a study of low impact and soft path strategies for management of water supply, waste water, and stormwater. The report will be delivered to Congress within 2 years of enactment.

The bill requires a report within 18 months of enactment and every two years thereafter on research and development projects and on the outreach and communication activities conducted by the Agency. The bill authorizes \$20 million per year for fiscal years 2009 through 2013.

#### VII. SECTION-BY-SECTION ANALYSIS OF THE BILL, AS REPORTED

##### *Section 1: Short title*

The Water-Use Efficiency and Conservation Research Act.

##### *Section 2: Findings*

Section 2 includes the Congressional findings and defines the need for expanding the scope of research and development conducted by the Environmental Protection Agency to include water-use efficiency and conservation to address the problems of increasing water shortages across the country.

##### *Section 3: Research program*

Section 3 directs the Assistant Administrator to establish a research and development program within the Environmental Protection Agency's Office of Research and Development to promote water-use efficiency and conservation. The bill provides examples of several areas the program should address including water storage and distribution systems; and behavioral, social, and economic barriers to achieving greater water-use efficiency. In addition, the bill states the program should research technologies and processes that enable the collection, storage, treatment, and reuse of rainwater, stormwater, and greywater. The specific projects selected for funding through the program should reflect the needs identified by a variety of stakeholders including water managers, state and local governments, and other interested parties. In execution of the program, the Assistant Administrator may provide extramural grants to colleges and universities and encourage participation by Minority Serving Institutions.

##### *Section 4: Strategic plan*

Section 4 directs the Assistant Administrator to coordinate the development of a strategic plan for the program. The Plan's contents shall outline the research goals and priorities of the program, identify other current federal research efforts on water that are di-

rected toward conservation, and consider reports and studies on water-use efficiency and conservation. EPA's Science Advisory Board is directed to review the Plan.

*Section 5: Technology transfer*

Section 5 directs the Assistant Administrator to collect and disseminate information on current water-use efficient and conservation technologies and practices to facilitate their adoption. This information should include incentives and impediments to development and commercialization, best practices, and anticipated increases in water-use efficiency resulting from the implementation of these processes. In addition, Section 5 establishes a publicly-accessible clearinghouse on technologies and processes to promote water use efficiency and conservation.

*Section 6: Advanced water efficiency and development projects*

Section 6 directs the Assistant Administrator to carry out at least four projects to demonstrate cutting edge water-use efficiency and conservation technologies. Of the four projects, at least one shall be for a residential building and one for a commercial building. The buildings are required to be publicly accessible.

*Section 7: Report*

Section 7 directs the Assistant Administrator to report to Congress within 18 months of enactment and then on a biannual basis on the progress being made by the Environmental Protection Agency with regard to the research and development projects initiated and the outreach and communication activities conducted through the program.

*Section 8: Water management study and report*

Section 8 directs EPA to enter into an agreement with the National Academy of Sciences to produce a report on strategies for the management of water supply, wastewater, and stormwater within 2 years of enactment. The section includes an authorization of \$1 million for the study.

*Section 9: Authorization of appropriations*

Section 9 provides an authorization of \$20 million per year over a five year period from fiscal years 2009 through 2013.

## VIII. COMMITTEE VIEWS

The Committee believes EPA should give more focused attention to the goal of ensuring a sustainable water supply by increasing water-use efficiency and conservation.

The Committee expects the Office of Research and Development to work with the Office of Water to integrate the goals of water-use efficiency and conservation into the water quality and treatment programs conducted by the Agency. The Committee recognizes water quality and water supply are closely linked and believes the Agency should pursue and encourage implementation of options that will accomplish both water quality and water conservation goals.

H.R. 3957 explicitly lists a number of areas that the program should address including technologies and processes that enable

the collection, storage, treatment, and reuse of rainwater, stormwater, and greywater. The Committee does not consider this list to be exclusive. Innovative wastewater treatment options should also be pursued through this program if the Agency determines the research would meet the overall goals of increasing water-use efficiency and conservation.

The Committee expects the Assistant Administrator to consult with a variety of stakeholder groups to determine research needs and develop the strategic plan for research conducted under this program. Tribal and territorial governments should also be included in these consultations.

The Committee expects the strategic plan for this program to be developed in accordance with the Agency's strategic planning process for other research programs. The plan for the research program on water use efficiency and conservation should consider and be integrated, as appropriate into other Agency research plans on water resources including the strategic plans for drinking water, water quality, and ecological research.

The Committee recognizes the goals of increased water-use efficiency and conservation will not be achieved if the results of the research and technology development of this program are not implemented by the public and private sectors with responsibilities of water management and by individual citizens. The Committee believes a strong technology transfer program is necessary to ensure wide dissemination of the results of this research conducted under this program.

The Committee expects the development projects required under Section 6 to serve as educational tools for local communities through tours and local outreach programs. The Committee believes providing access to the system designs and specific information about the technologies incorporated into the buildings that participate in these projects via the program's website will encourage others to adopt water conserving designs and technologies.

#### IX. COST ESTIMATE

A cost estimate and comparison prepared by the Director of the Congressional Budget Office under section 402 of the *Congressional Budget Act of 1974* has been timely submitted to the Committee on Science and Technology prior to the filing of this report and is included in Section X of this report pursuant to House Rule XIII, clause 3(c)(3).

H.R. 3957 does not contain new budget authority, credit authority, or changes in revenues or tax expenditures. Assuming that the sums authorized under the bill are appropriated, H.R. 3957 does authorize additional discretionary spending, as described in the Congressional Budget Office report on the bill, which is contained in Section XI of this report.

#### X. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

##### *H.R. 3957—Water Use Efficiency and Conservation Research Act*

Summary: H.R. 3957 would authorize appropriations totaling \$101 million over the 2009–2013 period for the Environmental Protection Agency (EPA) to support activities to promote conservation and the efficient use of water. Assuming appropriation of the au-

thorized amounts, CBO estimates that implementing H.R. 3957 would cost \$86 million over the 2009–2013 period and \$15 million after 2013. Enacting the legislation would not affect direct spending or revenues.

H.R. 3957 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary impact of H.R. 3957 is shown in the following table. The costs of this legislation fall within budget function 300 (natural resources and environment).

	By fiscal year, in millions of dollars—					
	2009	2010	2011	2012	2013	2009–2013
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Authorization Level .....	21	20	20	20	20	101
Estimated Outlays .....	9	17	20	20	20	86

Basis of estimate: H.R. 3957 would authorize EPA to establish a research and development program to improve the storage, treatment, and distribution of water in the United States. The bill directs EPA to conduct a study in cooperation with the National Academy of Sciences that would examine strategies to enhance water supply management. It also would require EPA to establish a publicly accessible clearinghouse to disseminate information regarding new technologies and processes that improve water-use efficiency. Finally, the bill would allow EPA to award grants to universities for research related to the conservation and efficient use of water.

H.R. 3957 would authorize the appropriation of \$21 million in 2009 and \$20 million in each of fiscal years 2010 through 2013. Assuming the appropriation of the authorized amounts, CBO estimates that implementing H.R. 3957 would cost \$86 million over the 2009–2013 period and \$15 million after 2013. That estimate is based on historical spending patterns for similar programs.

Intergovernmental and private-sector impact: H.R. 3957 contains no intergovernmental or private-sector mandates as defined in UMRA and would create a grant program for research on water-use efficiency benefitting institutions of higher education. Any costs state, local, or tribal governments might incur, including matching funds, would result from complying with conditions of aid.

Estimate prepared by: Federal Costs: Susanne Mehlman and Jeffrey LaFave; Impact on State, Local, and Tribal Governments: Neil Hood; Impact on the Private Sector: Amy Petz.

Estimate approved by: Theresa Gullo, Deputy Assistant Director for Budget Analysis.

#### XI. COMPLIANCE WITH PUBLIC LAW 104–4

H.R. 3957 contains no unfunded mandates.

#### XII. COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

The oversight findings and recommendations of the Committee on Science and Technology are reflected in the body of this report.

## XIII. STATEMENT ON GENERAL PERFORMANCE GOALS AND OBJECTIVES

Pursuant to clause (3)(c) of House Rule XIII, the goal of H.R. 3957 is to increase research, development, education, and technology transfer activities at the Environmental Protection Agency (EPA) related to water use efficiency and conservation technologies and practices. These activities should improve technologies and processes to increase water availability and supply in the United States.

## XIV. CONSTITUTIONAL AUTHORITY STATEMENT

Article I, section 8 of the Constitution of the United States grants Congress the authority to enact H.R. 3957.

## XV. FEDERAL ADVISORY COMMITTEE STATEMENT

H.R. 3957 does not establish nor authorize the establishment of any advisory committee.

## XVI. CONGRESSIONAL ACCOUNTABILITY ACT

The Committee finds that H.R. 3957 does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the *Congressional Accountability Act* (Public Law 104–1).

## XVII. EARMARK IDENTIFICATION

H.R. 3957 does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9(d), 9(e), or 9(f) of rule XXI.

## XVIII. STATEMENT ON PREEMPTION OF STATE, LOCAL, OR TRIBAL LAW

This bill is not intended to preempt any state, local, or tribal law.

## XIX. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

H.R. 3957, as reported, makes no changes in existing law.

## XX. COMMITTEE RECOMMENDATIONS

On July 16, 2008, the Committee on Science and Technology favorably reported H.R. 3957, as amended, by a voice vote and recommended its enactment.



## **XXI. PROCEEDINGS OF THE MARKUP BY THE SUBCOMMITTEE ON ENERGY AND ENVIRON- MENT ON H.R. 3957, THE WATER USE EFFI- CIENCY AND CONSERVATION RESEARCH ACT**

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**TUESDAY, MAY 6, 2008**

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT,  
COMMITTEE ON SCIENCE,  
Washington, DC.

The Subcommittee met, pursuant to call, at 10:10 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Nick Lampson [Chairman of the Subcommittee] presiding.

Chairman LAMPSON. Good morning. The Subcommittee on Energy and Environment will come to order.

Pursuant to notice, the Subcommittee on Energy and Environment meets to consider the following measures: H.R. 3957, the *Water Use Efficiency and Conservation Research Act*, and H.R. 2339, the *Produced Water Utilization Act of 2007*.

We will now proceed with the markup beginning with opening statements, and I will begin.

Today the Subcommittee will consider two bills aimed at increasing water supply through research and technology innovation. Water utilities across the country withdraw roughly 40 billion gallons of water per day for domestic consumption, industrial processing, energy production and fire protection. As population and energy use continue to grow, so will the demand for water. We need to find ways to preserve, reuse and augment our water supplies.

First, we will take up H.R. 3957, the *Water Use Efficiency and Conservation Research Act*, introduced by Representative Jim Matheson. H.R. 3957 establishes a research and development program within the Environmental Protection Agency's Office of Research and Development to promote water use efficiency and conservation.

Through this program, EPA will be able to develop and encourage the adoption of technologies and processes that will achieve greater water use efficiency, thus helping to address the water supply shortages. The program will help spur innovation in the collection, treatment and reuse of rainwater and greywater, the wastewater from sinks, baths and kitchen appliances.

Next, we will consider H.R. 2339, the *Produced Water Utilization Act*, introduced by my colleague from Texas and our Ranking Member, Mr. Hall. This bill creates a research, development and demonstration program to promote the beneficial reuse of water produced in connection with oil and gas extraction. In the United States, up to 2.3 billion gallons per day of produced water is generated, and unfortunately, this water is not of sufficient quality to be used to meet many of our needs for water. This legislation will produce innovative treatment technologies that will enable the reuse of this water in an environmentally responsible way.

These two bills are important steps in ensuring adequate water supply across the United States. I ask my colleagues to support passage of both pieces of legislation by our subcommittee this morning.

[The prepared statement of Chairman Lampson follows:]

PREPARED STATEMENT OF CHAIRMAN NICK LAMPSON

Today the Subcommittee will consider two bills aimed at increasing water supply through research and technology innovation. Water utilities across the country withdraw roughly 40 billion gallons of water per day for domestic consumption, industrial processing, energy production, and fire protection. As population and energy use continues to grow, so will the demand for water. We need to find ways to preserve, reuse, and augment our water supplies.

First, we will take up H.R. 3957, the *Water Use Efficiency and Conservation Research Act* introduced by Representative Jim Matheson. H.R. 3957 establishes a research and development program within the Environmental Protection Agency's Office of Research and Development to promote water-use efficiency and conservation.

Through this program, EPA will be able to develop and encourage the adoption of technologies and processes that will achieve greater water-use efficiency thus helping to address the water supply shortages. The program will help spur innovation in the collection, treatment, and reuse of rainwater and greywater—the waste water from sinks, baths and kitchen appliances.

Next, we will consider H.R. 2339, the *Produced Water Utilization Act* introduced by my colleague from Texas and our Ranking Member, Mr. Hall. This bill creates a research, development, and demonstration program to promote the beneficial reuse of water produced in connection with oil and gas extraction. In the United States, up to 2.3 billion gallons per day of produced water is generated. Unfortunately, this water is not of sufficient quality to be used to meet our many needs for water. This legislation will provide innovative treatment technologies that will enable the reuse of this water in an environmentally responsible way.

These two bills are important steps in ensuring adequate water supply across the United States. I ask my colleagues to support passage of both pieces of legislation by our subcommittee this morning.

Chairman LAMPSON. I now recognize Mr. Inglis to present his opening remarks.

Mr. INGLIS. Thank you, Mr. Chairman, for holding this markup. I appreciate Ranking Member Hall's and Mr. Matheson's work to introduce the bills we will address today. H.R. 2339, the *Produced Water Utilization Act*, and H.R. 3957, the *Water Use Efficiency and Conservation Research Act*, both highlight the need to think more conservatively about invaluable water resources.

We don't have to look far to realize the devastating effects water shortages can have in our lives. Fires threatening and destroying California, droughts debilitating crops in South Carolina and a number of other southeastern states, and global citizens have to travel farther and farther to have access to fresh water. By supporting research, development and demonstration projects in water use efficiency, conservation, and the challenges raised by produced

water, we can help improve our national and global response to water shortages.

Mr. Chairman, when we held a Subcommittee hearing on H.R. 3957 in October, the witnesses testified that there had been significant amount of investment from the private sector in water technologies. Since EPA was not invited as a witness to that hearing, I asked the EPA for comments on the work they were already doing in this area. I am sad to say that they have not yet replied to my request, and I would ask the EPA to submit their suggestions before the Full Committee markup.

Mr. Chairman and Mr. Matheson, I hope we can work together to ensure that we do not jeopardize or duplicate the work already being done at EPA and in the private sector.

Thank you, Mr. Chairman, and I look forward to working with you to advance the legislation.

[The prepared statement of Mr. Inglis follows:]

PREPARED STATEMENT OF REPRESENTATIVE BOB INGLIS

Thank you for holding this markup, Mr. Chairman.

I appreciate Ranking Member Hall's and Mr. Matheson's work to introduce the bills we will address today. H.R. 2339, the *Produced Water Utilization Act*, and H.R. 3957, the *Water Use Efficiency and Conservation Research Act*, both highlight the need to think more conservatively about invaluable water resources.

We don't have to look far to realize the devastating effects water shortages can have in our lives—fires threatening and destroying California, droughts debilitate crops in South Carolina and a number of other southeastern states, and global citizens have to travel farther and farther to have access to fresh water. By supporting research, development, and demonstration projects in water use efficiency, conservation, and the challenges raised by produced water, we can help improve our national and global response to water shortages.

Mr. Chairman, when we held a Subcommittee hearing on H.R. 3957 back in October, the witnesses testified that there has been a significant amount of investment from the private sector in water technologies. Since EPA was not invited as a witness to that hearing, I asked for EPA's comments on what work they are already doing in this area. I'm disappointed that EPA has not yet replied to my request, and would ask that EPA submit their suggestions before the Full Committee markup. Mr. Chairman and Mr. Matheson, I hope we can work together to ensure that we do not jeopardize or duplicate the work already being done at EPA and in the private sector.

Thank you again, Mr. Chairman, and I look forward to working with you to advance this legislation.

Chairman LAMPSON. Thank you, Mr. Inglis.

Without objection, Members may place additional opening remarks in the record at this point.

We will now consider H.R. 3957, the *Water Use Efficiency and Conservation Research Act*. I mentioned the goals of the legislation in my opening, and I will just again express my support for the gentleman from Utah's bill and I now recognize Mr. Inglis to present any remarks on the bill.

Mr. INGLIS. Mr. Chairman, I have no further remarks.

Chairman LAMPSON. Does anyone wish to be recognized on this bill? Mr. Baird.

Mr. BAIRD. I would just commend the authors. You know, as we look at the situation in the world today, water is increasingly scarce, as was noted, and I commend the authors of both pieces of legislation today for recognizing that. I also particularly appreciate Mr. Matheson's bill language dealing with the social and behavioral aspects of water conservation and reuse.

Chairman LAMPSON. Thank you very much.

Anyone else wish to be recognized? I ask unanimous consent then that the bill is considered as read and open to amendment at any point and that Members proceed with the amendments in order of the roster. Without objection, so ordered.

Are there any amendments? Hearing none, the vote is on the bill, H.R. 3957, the *Water Use Efficiency and Conservation Research Act*. All those in favor will say aye. Those opposed, say no. In the opinion of the Chair, the ayes have it.

I recognize Mr. Baird to offer a motion.

Mr. BAIRD. Mr. Chairman, I move that the Subcommittee favorably report H.R. 3957 to the Full Committee. Furthermore, I move that staff be instructed to prepare the Subcommittee legislative report and make necessary technical and conforming changes to the bill in accordance with the recommendation of the Subcommittee.

Chairman LAMPSON. The question is on the motion to report the bill favorably. Those in favor of the motion will signify by saying aye. Those oppose, no. The ayes have it, and the bill is favorably reported.

Without objection the motion to reconsider is laid upon the table. Subcommittee Members may submit additional or Minority views on the measure.

I want to thank the Members for their attendance. This concludes our Subcommittee markup. Mr. Hall can go make his speech and the rest of us can have a good day. We are adjourned.

[Whereupon, at 10:22 a.m., the Subcommittee was adjourned.]

## Appendix:

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H.R. 3957, SECTION-BY-SECTION ANALYSIS

110TH CONGRESS  
1ST SESSION

# H. R. 3957

To increase research, development, education, and technology transfer activities related to water use efficiency and conservation technologies and practices at the Environmental Protection Agency.

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## IN THE HOUSE OF REPRESENTATIVES

OCTOBER 24, 2007

Mr. MATHESON introduced the following bill; which was referred to the  
Committee on Science and Technology

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## A BILL

To increase research, development, education, and technology transfer activities related to water use efficiency and conservation technologies and practices at the Environmental Protection Agency.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Water Use Efficiency  
5 and Conservation Research Act”.

6 **SEC. 2. FINDINGS.**

7 Congress finds the following:

1           (1) Between 1950 and 2000, the United States  
2           population increased nearly 90 percent. In that same  
3           period, public demand for water increased 209 per-  
4           cent. Americans now use an average of 100 gallons  
5           of water per person each day. This increased de-  
6           mand has put additional stress on water supplies  
7           and distribution systems, threatening both human  
8           health and the environment.

9           (2) Thirty six States are anticipating local, re-  
10          gional, or statewide water shortages by 2013. In ad-  
11          dition, climate change related effects are expected to  
12          exacerbate already scarce water resources in many  
13          areas of the country.

14          (3) The Intergovernmental Panel on Climate  
15          Change's 2007 assessment states that water stored  
16          in glaciers and snow cover is projected to decline, re-  
17          ducing water availability to one-sixth of the world's  
18          population that relies upon meltwater from major  
19          mountain ranges. The Intergovernmental Panel on  
20          Climate Change also predicts droughts will become  
21          more severe and longer lasting in a number of re-  
22          gions.

23          (4) Water conservation should be a national  
24          goal and the Environmental Protection Agency  
25          should work with nongovernmental partners to

1 achieve that goal. The Environmental Protection  
2 Agency should support the research, development,  
3 and dissemination of technologies and processes that  
4 will achieve greater water use efficiency.

5 (5) WaterSense is a voluntary public-private  
6 partnership program established by the Environ-  
7 mental Protection Agency to promote water effi-  
8 ciency by helping consumers identify water-efficient  
9 products and practices. The Environmental Protec-  
10 tion Agency estimates that if all United States  
11 households installed water-efficient appliances, the  
12 country would save more than 3,000,000,000,000  
13 gallons of water and more than \$17,000,000,000 per  
14 year.

15 (6) The WaterSense program has developed a  
16 network of partners, and therefore can disseminate  
17 the results of research on technologies and processes  
18 that achieve greater water use efficiency.

19 **SEC. 3. RESEARCH PROGRAM.**

20 (a) IN GENERAL.—The Assistant Administrator for  
21 Research and Development of the Environmental Protec-  
22 tion Agency (in this Act referred to as the “Assistant Ad-  
23 ministrator”) shall establish a research and development  
24 program to promote water use efficiency and conservation,  
25 including—



1 (1) technologies and processes that enable the  
2 collection, treatment, and reuse of rainwater and  
3 greywater;

4 (2) water storage and distribution systems; and

5 (3) behavioral, social, and economic barriers to  
6 achieving greater water use efficiency.

7 (b) CONSIDERATIONS.—In planning and imple-  
8 menting the program the Assistant Administrator shall  
9 consider—

10 (1) research needs identified by water resource  
11 managers, State and local governments, and other  
12 interested parties; and

13 (2) technologies and processes likely to achieve  
14 the greatest increases in water use efficiency.

15 **SEC. 4. TECHNOLOGY TRANSFER.**

16 The Assistant Administrator, building on the results  
17 of the activities of the program established under section  
18 3, shall—

19 (1) facilitate the adoption of technology and  
20 processes to increase water use, water efficiency, and  
21 conservation; and

22 (2) collect and disseminate information on tech-  
23 nologies and processes to increase water use and  
24 conservation, including information on—

1 (A) incentives and impediments to develop-  
2 ment and commercialization;

3 (B) best practices; and

4 (C) anticipated increases in water use effi-  
5 ciency resulting from the implementation of  
6 specific technologies and processes.

7 **SEC. 5. REPORT.**

8 Not later than 18 months after the date of enactment  
9 of this Act, and once every 2 years thereafter, the Assist-  
10 ant Administrator shall transmit to Congress a report  
11 which details the progress being made by the Environ-  
12 mental Protection Agency with regard to—

13 (1) research projects initiated by the Agency;

14 and

15 (2) outreach and communication activities con-  
16 ducted by the Agency.

17 **SEC. 6. AUTHORIZATION OF APPROPRIATIONS.**

18 There are authorized to be appropriated to the As-  
19 sistant Administrator for carrying out this Act such sums  
20 as may be necessary for each of the fiscal years 2009  
21 through 2013.

○

SECTION-BY-SECTION ANALYSIS OF H.R. 3957,  
WATER USE EFFICIENCY AND CONSERVATION RESEARCH ACT

Purpose: To increase research, development, education, and technology transfer activities related to water use efficiency and conservation technologies and practices at the Environmental Protection Agency (EPA).

**Section 1: Short Title**

The “Water Use Efficiency and Conservation Research Act”.

**Section 2: Findings**

Section 2 includes the Congressional findings and defines the need for expanding the scope of research and development conducted by the Environmental Protection Agency to include water use efficiency and conservation to address the problems of increasing water shortages across the country.

**Section 3: Research Program**

Section 3 directs the Assistant Administrator to establish a research, development, and demonstration program within the Environmental Protection Agency’s Office of Research and Development to promote water use efficiency and conservation. The bill provides examples of several areas the program should address including water storage and distribution systems; and behavioral, social, and economic barriers to achieving greater water use efficiency. In addition, the bill states the program should research technologies and processes that enable the collection, treatment, and reuse of rainwater and greywater. The specific projects selected for funding through the program should reflect the needs identified by local and State water managers.

**Section 4: Technology Transfer**

Section 4 directs the Assistant Administrator to collect and disseminate information on current water use efficient and conservation technologies and practices to facilitate their adoption. This information should include incentives and impediments to development and commercialization, best practices, and anticipated increases in water use efficiency resulting from the implementation of these processes.

**Section 5: Report**

Section 5 directs the Assistant Administrator to report to Congress on the progress being made by the Environmental Protection Agency with regard to the research projects initiated, and the outreach and communication activities conducted through the program.

**Section 6: Authorization of Appropriations**

Section 6 provides a five-year authorization of the program with such sums as necessary to carry out the program.

## XXII. PROCEEDINGS OF THE FULL COMMITTEE MARKUP ON H.R. 3957, THE WATER USE EFFICIENCY AND CONSERVATION RESEARCH ACT

WEDNESDAY, JULY 16, 2008

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE,  
*Washington, DC.*

The Committee met, pursuant to call, at 10:05 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Bart Gordon [Chairman of the Committee] presiding.

Chairman GORDON. Good morning. The Committee will come to order.

Pursuant to notice, the Committee on Science and Technology meets to consider the following measures: H.R. 3957, the *Water Use Efficiency and Conservation Research Act*; H.R. 2339, the *Produced Water Utilization Act of 2007*; and H.R. 6323, *To establish a research, development, demonstration and commercial application program to promote research of appropriate technologies for heavy duty plug-in hybrid vehicles, and for other purposes*.

Before we start the markup, we have some Committee business to attend to. Yesterday, Ms. Donna Edwards of Maryland was appointed to serve on the Committee on Science and Technology. We currently have an open subcommittee slot on the Energy and Environmental Subcommittee, and I would like to ask unanimous consent that Ms. Edwards be elected to the Subcommittee. Without objection, so ordered.

Congratulations, Ms. Edwards. I know that a lot that we do here on this committee affects Maryland and we look forward to working with you to get your input on that and also for you to be a liaison as well as Mr. Bartlett.

Mr. Bartlett, do you want to welcome our new Member?

Mr. BARTLETT. Very happy to have you aboard. Our districts adjoin each other. When we have common interests, I will look forward to working with you. Thank you.

Ms. EDWARDS. Thank you, Mr. Chairman and Mr. Bartlett. Thank you.

Chairman GORDON. And when you don't have common interests, you will still work with her though, won't you?

Mr. BARTLETT. Absolutely, but all the more so when we have common interests.

Chairman GORDON. Thank you. We will now proceed with the markup.

Dwindling water supplies across the United States continue to percolate as the major disaster on our nation's horizon. Despite large spring rains in some states, the U.S. Drought Monitor shows that severe drought still grips the American Southeast, California across the Rocky Mountains, and Oklahoma and the Texas panhandle. In an effort to protect the country from an impending

water scarcity crisis, the Committee has begun to search out ways for the Federal Government to spur new technology innovation in water research and development. Today the Committee will consider two bills aimed at preventing a future water supply catastrophe.

First, we will take up H.R. 3957, the *Water Use Efficiency and Conservation Research Act*, introduced by Representative Jim Matheson. H.R. 3957 establishes a research and development program within the Environmental Protection Agency's Office of Research and Development to promote water-use efficiency and conservation.

Through this program, EPA will be able to develop and encourage the adoption of technologies and processes that will achieve greater water-use efficiencies, thus helping to address the water supply shortages. In addition, H.R. 3957 directs EPA to disseminate information on current water-use efficiencies and conservation technologies. This information will include incentives and impediments to development and commercialization.

Next we will consider H.R. 2339, the *Produced Water Utilization Act*, introduced by our colleague from Texas and our Ranking Member, Mr. Hall. This bill creates a research, development and demonstration program to promote beneficial reuse of water produced in connection with oil and gas extraction. In the United States, up to 2.3 billion gallons per day of produced water is generated. Unfortunately, this water is not of sufficient quality to be used to meet our many needs for water. This legislation will provide innovative treatment technologies that will enable the reuse of this water in an environmentally responsible way.

Let me also say that Congressman Hall and I have been discussing the issues of water. We think there are a variety of other things. We started this effort this year. We are going to continue to look into it next year and we hope that we are going to have again probably a series of bipartisan bills that we might combine for a real, again a major effort in water conservation and technologies for this important problem that faces our nation.

Finally, we will consider H.R. 6323, the *Heavy Duty Hybrid Research, Development and Demonstration Act*, introduced by the Ranking Member of the Investigations and Oversight Subcommittee, Mr. Sensenbrenner. With skyrocketing fuel prices, energy concerns have been cemented at the forefront of public awareness. This committee has responded by pursuing an aggressive energy agenda in 2010 and we will continue this in the next Congress, and we provided a substantial portfolio of bills to the comprehensive energy package which became law last December. Mr. Sensenbrenner's bill represents another common sense approach to chipping away at our energy challenge.

The heavy duty sector accounts for a very large portion of the Nation's fuel use and transportation-based emissions and even small improvements in their efficiency can have a substantial impact. Hybrid technologies hold the promise of greatly reducing the fuel consumption by the Nation's truck fleet. Mr. Sensenbrenner and his staff have worked closely with the Majority to ensure that grants under this program explore a wide range of hybrid tech-

nologies and applications and he has made further improvements with an amendment in the nature of a substitute.

These three bills are important steps in ensuring that we have adequate water and power supplies across the country, and in pushing innovation in the heavy truck sector. I want to thank Representative Matheson, Representative Sensenbrenner and Ranking Member Hall for their efforts in these two important areas, and I ask that Members of the Committee support all three bills and move for their passage out of the Committee.

I now recognize Mr. Hall to present his opening remarks.

[The prepared statement of Chairman Gordon follows:]

#### PREPARED STATEMENT OF CHAIRMAN BART GORDON

Good Morning. The Committee will come to order. Pursuant to notice, the Committee on Science and Technology meets to consider the following measures:

- H.R. 3957, the *Water Use Efficiency and Conservation Research Act*;
- H.R. 2339, the *Produced Water Utilization Act of 2007*; and,
- H.R. 6323, *To establish a research, development, demonstration, and commercial application program to promote research of appropriate technologies for heavy duty plug-in hybrid vehicles, and for other purposes.*

Before we get started with the markup, we have some Committee business to attend to. Yesterday Ms. Donna Edwards of Maryland was appointed to serve on the Committee on Science and Technology.

We currently have an open subcommittee slot on the Energy and Environment Subcommittee. I would ask unanimous consent that Ms. Edwards be elected to this subcommittee. Without objection, so ordered.

Congratulations, and welcome to the Committee Ms. Edwards.

We will now proceed with the markup.

Dwindling water supplies across the United States continue to percolate as a major disaster on our nation's horizon. Despite tremendous spring rains in some States, the U.S. Drought Monitor shows that severe drought still grips the American Southeast, California across the Rocky Mountains, and Oklahoma and the Texas Panhandle. In an effort to protect the country from an impending water scarcity crisis, the Committee has begun to search out ways for the Federal Government to spur new technological innovations in water research and development. Today the Committee will consider two bills aimed at preventing a future water supply catastrophe.

First, we will take up H.R. 3957, the *Water Use Efficiency and Conservation Research Act* introduced by Representative Jim Matheson. H.R. 3957 establishes a research and development program within the Environmental Protection Agency's Office of Research and Development to promote water-use efficiency and conservation.

Through this program, EPA will be able to develop and encourage the adoption of technologies and processes that will achieve greater water-use efficiency, thus helping to address the water supply shortages. In addition, H.R. 3957 directs EPA to disseminate information on current water-use efficient and conservation technologies. This information will include incentives and impediments to development and commercialization.

Next, we will consider H.R. 2339, the *Produced Water Utilization Act* introduced by my colleague from Texas and our Ranking Member, Mr. Hall. This bill creates a research, development, and demonstration program to promote the beneficial reuse of water produced in connection with oil and gas extraction. In the United States, up to 2.3 billion gallons per day of produced water is generated. Unfortunately, this water is not of sufficient quality to be used to meet our many needs for water. This legislation will provide innovative treatment technologies that will enable the reuse of this water in an environmentally responsible way.

Finally, we will consider H.R. 6323, the *Heavy Duty Hybrid Research, Development, and Demonstration Act*, introduced by the Ranking Member of the Investigations and Oversight Subcommittee, Mr. Sensenbrenner. With skyrocketing fuel prices, energy concerns have been cemented at the forefront of public awareness.

This committee responded by pursuing an aggressive energy agenda in 110th Congress, and provided a substantial portfolio of bills to the comprehensive energy package which became law last December. Mr. Sensenbrenner's bill represents another common sense approach to chipping away at our energy challenge.

The heavy truck sector accounts for a very large portion of the Nation's fuel use and transportation-based emissions, and even small improvements in their efficiency can have a substantial impact. Hybrid technologies hold the promise of greatly reducing the fuel consumed by the Nation's truck fleet. Mr. Sensenbrenner and his staff have worked closely with the Majority to ensure that grants under this program explore a wide range of hybrid technologies and applications, and he has made further improvements with the Amendment in the Nature of a Substitute.

These three bills are important steps in ensuring that we have adequate water and power supplies across the country, and in pushing innovation in the heavy truck sector. I want to thank Representative Matheson, Representative Sensenbrenner, and Ranking Member Hall for their efforts in these two important areas. I ask that Members of the Committee support all three bills and move for their passage out of the Committee.

I now recognize Mr. Hall to present his opening remarks.

Mr. HALL. Mr. Chairman, I thank you for holding the markup today and for the three bills before us, and because you have so adequately explained these bills, I can make my remarks very brief.

I simply would put my entire statement into the record with unanimous consent and I support the three bills we are marking up today and hope our colleagues will as well, and I yield back the balance of my time.

[The prepared statement of Mr. Hall follows:]

PREPARED STATEMENT OF REPRESENTATIVE RALPH M. HALL

Mr. Chairman, thank you for holding this markup today to advance the three bills before us today. I will keep my opening remarks brief.

H.R. 3957, the *Water Use Efficiency and Conservation Research Act* introduced by Mr. Matheson would create a water technology research program at the EPA. Research and development of technologies that promote greater efficiencies in water use is one of the several responses we can make to the water shortages many of our constituents are experiencing.

The second bill, H.R. 2339, the *Produced Water Utilization Act of 2008* is one I introduced, and I feel strongly about its potential to benefit our dual needs of energy and water. This bill would provide important funding for research, development, demonstration, and commercial application of technologies to purify and use produced water from oil and natural gas extraction for human, agricultural, and industrial purposes.

H.R. 6323, Mr. Sensenbrenner's heavy duty hybrid vehicle bill, would establish a program at DOE to provide grants to carry out projects to advance research and development and to demonstrate advanced technologies for heavy duty plug-in hybrid vehicles. While heavy duty trucks make up a small portion of the market, the potential for fuel savings through hybrid technology is substantial.

Thank you, Mr. Chairman. I support the three bills we're marking up today and hope that our colleagues will as well. I yield back the balance of my time.

Chairman GORDON. That was a wonderful statement, Mr. Hall. Without objection, Members may place statements in the record at this point.

[The prepared statement of Ms. Richardson follows:]

PREPARED STATEMENT OF REPRESENTATIVE LAURA RICHARDSON

Chairman Gordon, Ranking Member Hall, and fellow Members of the Science and Technology Committee, I rise in strong support of each piece of legislation that is slated for today's Full Committee markup.

**H.R. 3957, the Water Use Efficiency and Conservation Research Act**

First I would like to thank my colleague Rep. Matheson (D-UT) for introducing H.R. 3957, the *Water Use Efficiency and Conservation Research Act*, and for his leadership on this issue. My home State of California has dealt with its own series of water supply issues in the past. Likewise, State and local officials in California have pursued this issue in an aggressive manner. In my district we have a nation-

ally recognized desalination project. The Long Beach City Council implemented strict water conservation regulations.

Fact of the matter is Americans consume approximately 26 billion gallons of water per day, and similar to our consumption of oil, we are all going to have to learn to conserve.

H.R. 3957 is a sound piece of legislation that designates the Environmental Protection Agency as the primary federal agency tasked with the responsibility of improving our nation's water use conservation technology. Given the EPA's track record on water quality issues, asking the agency to participate in this endeavor seems like a reasonable fit.

Thirty years ago President Carter advised the Nation that conservation was necessary to our quality of life. This legislation takes a major step in progressing from statements to attainable goals. I encourage my colleagues to support this bill.

#### **H.R. 2339, the Produced Water Utilization Act of 2007**

I want to commend the distinguished Ranking Member, Mr. Hall for introducing H.R. 2339, the *Produced Water Utilization Act of 2007*.

We all agree that we must increase our domestic supply of energy. However this process results in a product called produced water, which is water that is contaminated by dissolved solids.

Consequently, this water supply is rendered useless for consumption or irrigation and must be pumped back into the ground to dispose of safely.

The legislation that Mr. Hall introduced will allow us to safely utilize produced water thereby creating an additional source of water for human consumption and irrigation.

This is a sound piece of legislation and I encourage my colleagues to support this bill.

#### **H.R. 6323, Heavy Duty Plug-In Hybrid Vehicle R&D**

I want to acknowledge my colleague Rep. Sensenbrenner (R-WI) for introducing H.R. 6323, a bill to promote heavy duty plug-in hybrid R&D.

While we have seen a concerted effort to bring this technology to passenger vehicles, commercial vehicles are far behind despite their heavy fuel consumption.

Indeed we heard testimony during the hearing on Mr. Sensenbrenner's bill that this technology will save each heavy duty truck 1,000 gallons of fuel per year. With the rising cost of energy and many local and State governments facing budget constraints, this legislation could impact their respective departments and reduce the cost of business.

In my home State of California, Pacific Gas & Electric, which serves northern and central California, has been a leader on this issue, utilizing this technology in their service trucks. We have to change the way we consume energy in this country, and the Federal Government has to take a leading role in this effort.

H.R. 6323 will take us in the right direction, and I encourage my colleagues to support this bill.

Mr. Chairman I yield back my time.

[The prepared statement of Mr. Mitchell follows:]

#### **PREPARED STATEMENT OF REPRESENTATIVE HARRY E. MITCHELL**

Thank you, Mr. Chairman.

Today we will mark up H.R. 3957, the *Water Use Efficiency and Conservation and Research Act*, H.R. 2339, the *Produced Water Utilization Act*, and H.R. 6323, the *Heavy Hybrid Truck Research, Development, and Demonstration Act*.

Arizona is no stranger to the pressures of rising population and prolonged drought.

We are one of the fastest growing states, and despite some helpful precipitation this winter, many portions of our state are still well into a second decade of drought.

I believe that it is absolutely critical that we address the growing shortage of our nation's water supply and work to establish progressive and cost-effective water resource management policies.

H.R. 3957 would help us gain a better understanding of our water use and shortages by establishing a research and development program within EPA to promote water efficiency and conservation.

I urge my colleagues to support this important legislation.

I yield back.



Chairman GORDON. We will now consider H.R. 3957, the *Water Use Efficiency and Conservation Research Act*. I recognize the gentleman from Utah for five minutes to discuss his bill.

Mr. MATHESON. Well, thank you, Mr. Chairman.

Dwindling water supplies are an issue across the country. Thirty-six states are currently or expect to experience significant water shortages by just 2013. That is why I introduced H.R. 3957, the *Water Use Efficiency and Conservation Act*. This bill would establish a research and development program within the Environmental Protection Agency's Office of Research and Development to promote water efficiency and conservation.

Mr. Chairman, tough decisions lie ahead for water managers who need to balance the needs of agriculture, consumption by cities, industrial and energy production, transportation, tourism, wastewater treatment, emergency response and ecosystems. We are not going to solve this problem overnight, but H.R. 3957 will provide us with several important tools to address these issues with technology and innovative thinking. By encouraging research and development into water-use efficiency, we can create a path to increase the efficiency of our nation's water supplies.

H.R. 3957 would expand EPA's scope and involvement in solving the Nation's water crisis by researching innovations in water storage and distribution systems as well as behavioral, social and economic barriers to achieving greater water efficiency. In addition, the program will research technologies and processes that enable the collection, treatment and reuse of rainwater and greywater, wastewater from sinks, baths and kitchen appliances. I cannot repeat enough how important federal action on water is to my constituents and to all Americans in drought-affected areas.

Mr. Chairman, I appreciate your work on this and the work of the Minority staff as well, and I yield back the balance of my time.  
[The prepared statement of Mr. Matheson follows:]

PREPARED STATEMENT OF REPRESENTATIVE JIM MATHESON

Thank you Mr. Chairman.

Dwindling water supplies are creating concern across the country. Thirty-six states are currently or expect to experience significant water shortages by 2013.

That is why I introduced H.R. 3957, the *Water Use Efficiency and Conservation Act*. This bill would establish a research and development program within the Environmental Protection Agency's Office of Research and Development (ORD) to promote water efficiency and conservation.

Tough decisions lie ahead for water managers who must balance the needs of agriculture, consumption by cities, industrial and energy production, transportation, tourism, wastewater treatment, emergency response, and ecosystems. We cannot solve this problem overnight. But H.R. 3957 will provide us with several important tools to address the coming crisis with technology and innovative thinking. By encouraging research and development into water-use efficiency, we can create a path to increase our nation's water supplies.

H.R. 3957 would expand EPA's scope and involvement solving the Nation's water crisis by researching innovations in water storage and distribution systems, as well as, behavioral, social, and economic barriers to achieving greater water efficiency. In addition, the program will research technologies and processes that enable the collection, treatment, and reuse of rainwater and greywater, wastewater from sinks, baths and kitchen appliances. I cannot repeat how important federal action on water is to my constituents and to all Americans in drought affected areas. I yield back the balance of my time.

Chairman GORDON. Mr. Hall, do you have some remarks?

Mr. HALL. I do, thank you Mr. Chairman.

In the last few years, the National Academies of Science, the National Science and Technology Council, and several agencies in the executive branch have all issued reports regarding concern about the state of America's water supply, quality and its use. These many reports have offered hundreds of recommendations on what Congress can do to alleviate this growing problem. Although we have acted on a couple of these recommendations, there is still much to be done to safeguard our future water supplies.

Research and development of technologies that increase the efficiency of our daily water use in our homes, our schools, and our businesses can help minimize waste and conserve this valuable resource. This legislation establishes a research program at EPA, focusing their attention on such things as efficient water-use technologies and water distribution and storage systems. These are all areas that will be critical to effectively respond to national water shortages in the decades to come, and I thank you, Mr. Chairman. I yield back.

[The prepared statement of Mr. Hall follows:]

PREPARED STATEMENT OF REPRESENTATIVE RALPH M. HALL

Thank you, Mr. Chairman. In the last few years, the National Academies of Science, the National Science and Technology Council and several agencies in the Executive branch have all issued reports regarding concern about the state of America's water supply, quality and use. These many reports have offered hundreds of recommendations on what Congress can do to alleviate this growing problem. Although we have acted on a couple of these recommendations, there is still much to be done to safeguard our future water supplies.

Research and development of technologies that increase the efficiency of our daily water use in our homes, schools, or businesses can help minimize waste and conserve this valuable resource. This legislation establishes a research program at EPA, focusing their attention on such things as efficient water-use technologies and water distribution and storage systems. These are all areas that will be critical to effectively respond to national water shortages in the decades to come. Thank you, Mr. Chairman, and I yield back.

Chairman GORDON. Thank you, Mr. Hall.

Does anyone else wish to be recognized? If not, then I ask unanimous consent that the bill is considered as read and open to amendments at any point and that Members proceed with the amendments in order of the roster. Without objection, so ordered.

The first amendment on the roster is a manager's amendment offered by the gentleman from Utah, Mr. Matheson. Are you ready to proceed with your amendment?

Mr. MATHESON. Yes, Mr. Chairman, I have an amendment at the desk.

Chairman GORDON. The Clerk will report the amendment.

The CLERK. Amendment to H.R. 3957 offered by Mr. Matheson of Utah.

Chairman GORDON. I ask unanimous consent to dispense with the reading. Without objection, so ordered.

I recognize the gentleman for five minutes to explain his amendment.

Mr. MATHESON. Thank you, Mr. Chairman. I will fortunately not take all five minutes in describing this to you.

My amendment does three things. First, it makes technical corrections to the bill. Second, the amendment inserts a development

project section to demonstrate new technologies in a public setting. And lastly, the amendment adds an authorization level to the bill.

This amendment is derived from recommendations made at the Subcommittee legislative hearing that took place last fall which provided testimony on H.R. 3957 from water experts from many areas of expertise. Dr. Glen Daigger, Vice President at CH2MHill, testified to the importance of demonstrations as a part of the program, stating, "Demonstrations can pull several elements together to see how an integrated system can function at a much higher level." Several other witnesses echoed his comments on the need for such projects in the bill. Mr. Clerico, the designer of the Solaire Project in New York City, responded to a question raised about the need for a federal role in this area. He argued that many water technologies face a confidence barrier which would be crucial in speeding up public acceptance of certain water efficiency technologies.

On the subject of funding, witnesses gave a range of numbers for what would be appropriate. They discussed the fact that Singapore is investing \$330 million in new research on water technologies in a country of only 4.5 million people. Dr. Daigger recommended a budget of \$100 million a year as an optimal level for the program. Twenty million dollars was deemed the lowest amount to produce viable research on the program. To try to minimize the costs as best as possible but still produce a program that will offer good data and outcomes, that is why we proposed the \$20 million authorization level in this bill.

I hope my colleagues will support this manager's amendment. I will yield back the balance of my time.

[The prepared statement of Mr. Matheson follows:]

PREPARED STATEMENT OF REPRESENTATIVE JIM MATHESON

Thank you, Mr. Chairman.

My amendment does three things. First, it makes technical corrections to the bill. Second, the amendment inserts a development project section to demonstrate new technologies in a public setting. And lastly, the amendment adds an authorization level to the bill.

This amendment is derived from recommendations made at the Subcommittee legislative hearing last fall, which provided testimony on H.R. 3957 from water experts from many areas of expertise.

Dr. Glen Daigger, Vice President at CH2MHill, testified to the importance of demonstrations as a part of this program stating, "demonstrations can pull several elements together to see how an integrated system can function at a much higher level." Several other witnesses echoed his comments on the need for such projects in the bill. Mr. Clerico, the designer of the Solaire Project in NYC, responded to a question raised about the new for a federal role in this area. He argued that many water technologies face a "confidence barrier" which would crucial in speeding up public acceptance of certain water efficiency technologies.

On the subject of funding, witnesses gave a range of number for what would be appropriate. They discussed the fact that Singapore is investing \$330 million in new research on water technologies for only 4.5 million people. Dr. Daigger recommended a budget of \$100 million a year as an optimal level for the program. \$20 million was deemed the lowest amount to produce viable research on the subject. So as a loyal member of the Blue Dog Coalition, I am offering an authorization level that will produce good research and not waste taxpayer dollars.

I hope that all of my colleagues will support this amendment, and yield back the balance of my time.

Chairman GORDON. Thank you, Mr. Matheson. I assume this has been well vetted with the Minority? Mr. Matheson, I assume this has been——

Mr. MATHESON. Yes, Mr. Chairman, and I was remiss in acknowledging both Majority and Minority staff have been excellent to work with on this, and it is within the tradition of this committee that the staffs do work so well together and I appreciate their help on this amendment.

Chairman GORDON. Thank you, Mr. Matheson.

Is there further discussion on the amendment? If no, the vote occurs on the amendment. All in favor say aye. Opposed, no. The ayes have it and the amendment is agreed to.

The second amendment on the roster is an amendment offered just in time by the gentlelady from Texas, Mrs. Johnson. Are you ready to proceed?

Ms. JOHNSON. I am ready.

Chairman GORDON. The Clerk will report the amendment.

The CLERK. Amendment to H.R. 3957 offered by Ms. Eddie Bernice Johnson of Texas.

Chairman GORDON. I ask unanimous consent to dispense with the reading. Without objection, so ordered. I recognize the gentlelady for five minutes to explain her amendment.

Ms. JOHNSON. Thank you very much, Mr. Chairman. There is an uncanny thing that happens every time. I have another committee at the same time.

Thank you for considering this amendment. I want to commend my colleague, Mr. Matheson, for his good work to promote water-use efficiency and conservation research at the Environmental Protection Agency. This issue is one of great interest to me. Currently I serve as Chair of the Subcommittee on Water Resources and Environment on the Transportation and Infrastructure Committee. Just this spring, my subcommittee has studied a variety of issues including protecting America's coasts, managing our watersheds, understanding commercial vessels' environmental impacts, preserving water quality to our Great Lakes, and recommendations for a comprehensive water strategy to address the Nation's future water supply.

At present, several regions of the country face significant water resources challenges ranging from droughts in the Southeast and Southwest to the recent flooding in the Midwest. Watershed planning management and cutting-edge research can be important in helping to inform better policy decisions in addressing complicated water resources challenges. I am very pleased that the Committee on Science and Technology has taken interest in research relating to water, and I view water as one of our nation's most precious natural resources. In some areas of our nation, such as the Southwest, water supply is very scarce and it is worth our investment to support research into how to better conserve, collect, store and treat rainwater. In other regions of our Nation, flooding is a problem. My district in Dallas is at risk for flooding from the Trinity River and several of my colleagues on this committee face similar threats.

Managing this precious resource is a matter of national importance, and because of my involvement with the Water Resources Subcommittee, I suggest an amendment that makes a number of small changes to Mr. Matheson's bill and these primarily deal with including water storage as an allowable research activity, including water conservation as well as efficiency, providing for a publicly ac-

cessible clearinghouse for the sharing of information related to technology transfer, and encouraging minority-serving institutions to participate in research programs.

Mr. Chairman, I want to add that I submitted this amendment to the Committee on Monday afternoon, well in advance of the deadline, and I thank my colleagues for their consideration of this amendment and urge its passage.

The language here I think talks about what it does. It expands the EPA research program to include technologies and processes that enable the storage as well as collection, treatment and reuse of stormwater as well as rainwater and greywater. It expands the research program focus to include the behavioral barriers to water conservation, adds watershed planning as an additional research focus, directs the establishment of a publicly accessible clearinghouse for sharing water-use efficiency and conservation technologies, directs the Assistant Administrator to encourage minority-serving institutions to apply for such research grants, adds conservation along with portions for water-use efficiency throughout the bill. There are various parts that the language is placed.

Thank you, Mr. Chairman.

[The prepared statement of Ms. Johnson follows:]

PREPARED STATEMENT OF REPRESENTATIVE EDDIE BERNICE JOHNSON

Thank you, Chairman Gordon and Ranking Member Hall, for considering my amendment to H.R. 3957.

I want to commend my colleague, Mr. Matheson, for his good work to promote water use efficiency and conservation research at the Environmental Protection Agency.

This issue is one of great interest to me.

Currently, I serve as Chair of the Subcommittee on Water Resources and Environment, on the Transportation and Infrastructure Committee.

Just this spring, my subcommittee has studied a variety of issues including:

- protecting America's coasts;
- managing our watersheds;
- understanding commercial vessels' environmental impacts;
- preserving water quality of our Great Lakes; and
- recommendations for a comprehensive water strategy to address the Nation's future water supply needs.

At present, several regions of the country face significant water resource challenges ranging from droughts in the Southeast and Southwest to the recent flooding in the Midwest.

Watershed planning, management, and cutting-edge research can be important in helping to inform better policy decisions in addressing complicated water resources challenges.

I am very pleased that the Committee on Science and Technology has taken an interest in research relating to water.

I view water as one of our nation's most precious natural resources.

In some areas of our nation, such as the Southwest, water is very scarce.

It is worth our investment to support research into how to better conserve, collect, store and treat rainwater.

In other regions of our nation, flooding is a problem. My district, in Dallas, is at risk of flooding by the Trinity River, and several of my colleagues on this committee face similar threats.

Managing this precious resource is a matter of national importance.

Because of my involvement with the Water Resources Subcommittee, I suggest an amendment that makes a number of small changes to Mr. Matheson's bill.

These primarily deal with:

- including water storage as an allowable research activity;
- including water conservation as well as efficiency;

- providing for a publicly-accessible clearinghouse for the sharing of information relating to technology transfer; and
- encouraging Minority Serving Institutions to participate in the research program.

Mr. Chairman, I want to add that I submitted this amendment to the Committee on Monday afternoon, well in advance of the deadline.

I thank my colleagues for their consideration of this amendment and urge its passage.

Thank you Mr. Chairman. I yield back.

Chairman GORDON. Thank you, Ms. Johnson.

Ms. Edwards, you will see that we all serve on different committees, and Ms. Johnson serves on the Transportation Committee and brings some of her expertise in that area over here to help make these bills better, and we appreciate that.

Is there further discussion on the bill? If no, the vote occurs on the amendment. All in favor of the amendment, say aye. Opposed, no. The ayes have it and the amendment is agreed to.

Now, the third amendment on the roster is an amendment offered by the gentleman from Georgia, Dr. Gingrey. Are you ready to proceed with your amendment?

Mr. GINGREY. Mr. Chairman, I am.

Chairman GORDON. The Clerk will report the amendment.

The CLERK. Amendment to H.R. 3957 offered by Mr. Gingrey of Georgia.

Chairman GORDON. I ask unanimous consent to dispense with the reading. Without objection, so ordered. I recognize the gentleman for five minutes to explain the amendment.

Mr. GINGREY. Thank you, Mr. Chairman. I first want to commend my colleague from Utah, Mr. Matheson, for introducing this legislation to address ways in which the Environmental Protection Agency can use its Office of Research and Development to promote technologies that increase water efficiency and conservation by collection, treatment and reuse of rainwater and greywater and research on water storage.

Mr. Chairman, over the past year, my home State of Georgia and specifically, my district, has experienced significant and historic drought conditions that have brought to the forefront what the future may hold for our local water supply. In addition to the drought conditions in my district in northwest Georgia, as my colleague from Texas said, a number of other states are facing similar challenges. Over the next five years, more than half of the states in our country anticipate some sort of water shortage that will wreak havoc on our environment as well as on our economy. I am encouraged that this legislation puts in place some methods to adopt emerging technologies to help us make better use of one of our most precious resources, of course, that is water. However, I do have some concerns that H.R. 3957 creates a program within the EPA's jurisdiction but without giving it proper direction about how to implement a strategic research plan to make this program successful.

So the amendment that I am offering today will work to modify this legislation by actually requiring the EPA to develop a coordinated plan within the agency's Office of Research and Development for research on water-use efficiency and conservation. This amendment will also require the EPA to provide reports to Congress on

how the goals are met on water-use efficiency, water conservation and expanded water supply, all of which are important not only in northwest Georgia but across the country. This amendment also recognizes potential research changes and allows the EPA flexibility to revise and amend as needed the operating plan to reflect scientific findings and national research priorities.

Mr. Chairman, my goal with this amendment is to help provide the EPA with a more honed directive so the agency can hit the ground running to utilize new technologies to increase our water efficiency. I have worked very closely with the Majority to ensure that this amendment improves H.R. 3957 without adding overly cumbersome bureaucracy to the EPA.

Finally, I would like to commend my colleagues for working on this important issue in a bipartisan manner and I am pleased that the Majority has been willing to work with me to improve this legislation. I urge all of my colleagues to support this amendment as well as the underlying bill, and I yield back.

Chairman GORDON. Thank you, Dr. Gingrey. I know that the drought really has had an impact in Georgia. This is an important bill, and you have made it better, and I think probably good enough that we won't have to put that pipe in the Tennessee River now once this gets implemented.

Mr. GINGREY. Well, Mr. Chairman, if you will yield back now, I wouldn't go as far as to say that.

Chairman GORDON. Is there further discussion on the amendment? If no, the vote occurs on the amendment. All in favor, say aye. Opposed, no. The ayes have it and the amendment is agreed to.

The fourth amendment on the roster is an amendment offered by the gentlelady from Arizona. Are you ready to proceed with your amendment?

Ms. GIFFORDS. Yes, Mr. Chairman.

Chairman GORDON. The Clerk will report the amendment.

The CLERK. Amendment to H.R. 3957 offered by Ms. Giffords of Arizona.

Chairman GORDON. I ask unanimous consent to dispense with the reading. Without objection, so ordered. I recognize the gentlelady for five minutes to explain her amendment.

Ms. GIFFORDS. Thank you, Mr. Chairman. Thank you, Ranking Member Hall as well.

Back in May when this committee held a hearing on water supply challenges for the 21st century, one of the expert witnesses here was Dr. Steven Parker, Director of Water Science and Technology Board of the National Research Council. It seems like it was a long time ago, but when we think about water issues, really just very, very recently. Committee Members may recall that in his testimony, Dr. Parker discussed some recent work that was being undertaken by the Water Science and Technology Board on water supply and water management. He also discussed some major challenges facing State and local governments in providing adequate water supplies to meet our society's competing and growing needs. It is interesting hearing from Mr. Gingrey what he has experienced in his home State of Georgia. I hail from Arizona, which is the second fastest growing state. It is a desert state, record droughts,

record population growth, so we are really challenged out in the Southwest as well. Now, as part of his response to Members' questions following the hearing, Dr. Parker conveyed his recommendations for a study of water management practices in use in the United States and around the globe. The purpose would be to identify effective practices that could be implemented or implemented more widely in the United States. This amendment, Mr. Chairman, would authorize such a study by the National Academies in coordination with the EPA. The study would examine innovative systemic approaches to managing water supply, wastewater and stormwater in urban areas and surrounding communities. But a special emphasis will be placed on studying the interrelationship of water supplies with other major systems such as energy and transportation. In addition to looking at practices that are already in place, both here and abroad, the study would identify priority research and development needs going forward. The study would also assess barriers to implementation of new practices.

Mr. Chairman, the study would emphasize both the soft-path and the low-impact approaches to water management, and these terms I think we are going to be hearing more about in the future. The term "soft path" refers to a framework for thinking about how to integrate different water supplies, for example, treatment, supply, delivery, to increase overall efficiency of use. Soft-path approaches emphasize using the natural capacities of ecosystems to provide filtration services and clean water. The term "low impact" in this context refers to technologies and practices for gathering and using the water that falls on any given site as rain. Together, both these terms describe the cutting edge in thinking about water management. In the 20th century, water management solutions are often characterized by expensive capital investment projects to transport water great distances and treat it in large centralized facilities. By contrast, 21st century solutions are much more likely to employ soft-path and low-impact approaches. The purpose of this study is to produce a report that will evaluate challenges and opportunities and then recommend innovative, integrated solutions. The report will serve as a practical reference for planners, scientists, engineers, non-governmental organizations and regulators concerned with water management.

I urge my colleagues to support this amendment, and with that, I yield back my time.

[The prepared statement of Ms. Giffords follows:]

PREPARED STATEMENT OF REPRESENTATIVE GABRIELLE GIFFORDS

Back in May, when the Committee held a hearing on Water Supply Challenges for the 21st century, one of the expert witnesses was Dr. Stephen Parker, Director of the Water Science and Technology Board of the National Research Council.

Committee Members may recall that in his testimony, Dr. Parker discussed recent work undertaken by the Water Science and Technology Board on water supply and water management. He also discussed major challenges facing states and local governments in providing adequate water supplies to meet society's competing and growing needs.

As part of his response to Member questions following the hearing, Dr. Parker conveyed his recommendation for a study of water management practices in use in the U.S. and around the world. The purpose would be to identify effective practices that could be implemented—or implemented more widely—in the United States. My amendment would authorize such a study.



The study would examine innovative, systematic approaches to managing water supply, wastewater, and storm water in urban areas and surrounding communities. A special emphasis would be placed on studying the inter-relationship of water systems with other major systems such as energy and transportation. In addition to looking at practices that are already in place, both here and abroad, the study would identify priority research and development needs going forward. The study would also assess barriers to implementation of new practices.

The study would emphasize "soft path" and "low impact" approaches to water management. The term "soft path" refers to a framework for thinking about how to integrate different water systems (for example, supply, treatment, etc.) and increase overall efficiency of use. Soft path approaches emphasize using the natural capacities of ecosystems to provide filtration services and clean water.

The term "low impact," in this context, refers to technologies and practices for gathering and using the water that falls on any given site as rain.

Together, these terms describe the cutting edge in thinking about water management. In the 20th century water management solutions were often characterized by expensive capital investment projects to transport water great distances and treat it in large, centralized facilities. By contrast, 21st century solutions are much more likely to employ "soft path" and "low impact" approaches.

The purpose of this study is to produce a report that will evaluate challenges and opportunities and then recommend innovative, integrated solutions. The report will serve as a practical reference for planners, scientists, engineers, non-governmental organizations, and regulators concerned with water management. I urge my colleagues to support this amendment.

With that, I yield back.

Chairman GORDON. Thank you, Ms. Giffords, for the thoughtful amendment.

Ms. Edwards, you will soon find that whether we are talking about water or pumpkins, somehow Ms. Giffords is able to work in Arizona into those.

Is there any further discussion on the amendment? If no, the vote occurs on the amendment. All in favor, say aye. Those opposed, no. The ayes have it. The amendment is agreed to.

Are there any other amendments? If no, then the vote on the bill, H.R. 3957 as amended—

Mr. ROHRABACHER. Mr. Chairman?

Chairman GORDON. Oh, excuse me. Mr. Rohrabacher.

Mr. ROHRABACHER. If I could strike the last word?

Chairman GORDON. Certainly. The gentleman is recognized for five minutes.

Mr. ROHRABACHER. Let me just note that in our area, Long Beach, I was able to secure some funds that were necessary for a research and development program for a local water district.

Chairman GORDON. Was that an earmark?

Mr. ROHRABACHER. It was an earmark. I, however, have not been one of the Republicans that are known for attacking earmarks, so I say so proudly, and let me just note, this could be an example of why earmarks are justified in most cases. The earmark I was able to secure for our local water district, this is before my colleague, Laura Richardson, joined us, but in cooperation with her predecessor, the local water district was able to do a research project that resulted in a desalinization system that uses 20 to 25 percent less energy to accomplish the same amount of desalinization. So the research that we are talking about in bills like this can have some very, very positive impacts. I just thought that I would put that on the record and suggest that what we are doing today could well, and is intended to, have some actual measurable results and public benefit. Thank you very much.

Chairman GORDON. If the gentleman will yield?

Mr. ROHRABACHER. Yes.

Chairman GORDON. Ms. Richardson has discussed this with me today. She is very proud of what is going on out there. Water, as I mentioned earlier, is a very, very important issue for this country and the world. There are going to be wars fought over water. You know, water is going to become more and more expensive. If my father knew, you know, that I was paying more for a thing of water than for a soft drink or a beer, you know, he would never believe that. As Ralph Hall says, California is divided by water. We have got agriculture versus communities. If you will pardon me, we just put our toe in this. I think we have gotten off to a good start. I was just thinking during this collaboration that hopefully over August or between the time we get ready to go, I would like to have a little think-tank session with the Minority and Majority staff and Members to talk about where we want to take this next year. We need to be the leader. Eddie Bernice, she is not here now, but she is doing some things on transportation. This is a very important issue and we need to get out in front of it, and we intend to.

Mr. ROHRABACHER. As I said, Mr. Chairman, reclaiming my time, that already I have seen in our local area that a research and development project actually was able to make some very positive changes and show a great reward for the amount of money that was put into the research project, so I thank you very much, Mr. Chairman.

Chairman GORDON. Certainly.

Mr. HALL. Mr. Chairman?

Chairman GORDON. Yes, Mr. Hall.

Mr. HALL. I pledge next year as Chairman to be as kind to you as you have been to me.

Chairman GORDON. I am sure you will. All right. So now H.R. 3957 as amended. All those in favor will say aye. All those opposed, no. In the opinion of the Chair, the ayes have it. I now recognize Mr. Matheson to offer a motion.

Mr. MATHESON. Mr. Chairman, I move that the Committee favorably report H.R. 3957 as amended to the House with the recommendation that the bill do pass. Furthermore, I move that staff be instructed to prepare the legislative report and make necessary technical and conforming changes and that the Chairman take all necessary steps to bring the bill before the House for consideration.

Chairman GORDON. The question is on the motion to report the bill favorably. Those in favor of the motion will signify by saying aye. Opposed, no. The ayes have it, and the bill is favorably reported. Without objection, the motion to reconsider is laid up on the table. Members will have two subsequent calendar days in which to submit supplemental Minority or additional views on the measure ending Monday, July 21 at 9 a.m.

I move pursuant to clause 1 of rule 22 of the Rules of the House of Representatives that the Committee authorize the Chairman to offer such motions as may be necessary in the House to adopt and pass H.R. 3957, the *Water Use Efficiency, Conservation and Research Act* as amended. Without objection, so ordered.

Before we adjourn, let me just say to everyone, this appears to be our last markup for this year and this session. Things, you know, went smoothly today, but the reason for that was that there

was lots of collaboration. I thank all of you for your presence. It is important for you to be here. I hope that one thing that we can do as we go into maybe September when we are not going to be having any markups is have the opportunity for us to sit down as a committee informally and talk about what we want to do next year, and I think we had a good discussion today. We want to find out what is important to your districts, what is important to the country, and we will try to get an agenda that either we will pass off to Mr. Hall or we will keep it here, whichever way it might be, but one way or the other, we want to work together, and I very, very sincerely thank everyone for a very productive year. I hope that you will all go back to your press secretaries and talk at home about these three bills that you got out today. There are more good ones.

Thank you very much, and we are adjourned.

[Whereupon, at 10:59 a.m., the Committee was adjourned.]



## Appendix:

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H.R. 3957, SECTION-BY-SECTION ANALYSIS, AMENDMENT ROSTER

110TH CONGRESS  
1ST SESSION

# H. R. 3957

To increase research, development, education, and technology transfer activities related to water use efficiency and conservation technologies and practices at the Environmental Protection Agency.

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## IN THE HOUSE OF REPRESENTATIVES

OCTOBER 24, 2007

Mr. MATHESON introduced the following bill; which was referred to the Committee on Science and Technology

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## A BILL

To increase research, development, education, and technology transfer activities related to water use efficiency and conservation technologies and practices at the Environmental Protection Agency.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Water Use Efficiency  
5 and Conservation Research Act”.

6 **SEC. 2. FINDINGS.**

7 Congress finds the following:

1           (1) Between 1950 and 2000, the United States  
2           population increased nearly 90 percent. In that same  
3           period, public demand for water increased 209 per-  
4           cent. Americans now use an average of 100 gallons  
5           of water per person each day. This increased de-  
6           mand has put additional stress on water supplies  
7           and distribution systems, threatening both human  
8           health and the environment.

9           (2) Thirty six States are anticipating local, re-  
10          gional, or statewide water shortages by 2013. In ad-  
11          dition, climate change related effects are expected to  
12          exacerbate already scarce water resources in many  
13          areas of the country.

14          (3) The Intergovernmental Panel on Climate  
15          Change's 2007 assessment states that water stored  
16          in glaciers and snow cover is projected to decline, re-  
17          ducing water availability to one-sixth of the world's  
18          population that relies upon meltwater from major  
19          mountain ranges. The Intergovernmental Panel on  
20          Climate Change also predicts droughts will become  
21          more severe and longer lasting in a number of re-  
22          gions.

23          (4) Water conservation should be a national  
24          goal and the Environmental Protection Agency  
25          should work with nongovernmental partners to

1 achieve that goal. The Environmental Protection  
2 Agency should support the research, development,  
3 and dissemination of technologies and processes that  
4 will achieve greater water use efficiency.

5 (5) WaterSense is a voluntary public-private  
6 partnership program established by the Environ-  
7 mental Protection Agency to promote water effi-  
8 ciency by helping consumers identify water-efficient  
9 products and practices. The Environmental Protec-  
10 tion Agency estimates that if all United States  
11 households installed water-efficient appliances, the  
12 country would save more than 3,000,000,000,000  
13 gallons of water and more than \$17,000,000,000 per  
14 year.

15 (6) The WaterSense program has developed a  
16 network of partners, and therefore can disseminate  
17 the results of research on technologies and processes  
18 that achieve greater water use efficiency.

19 **SEC. 3. RESEARCH PROGRAM.**

20 (a) IN GENERAL.—The Assistant Administrator for  
21 Research and Development of the Environmental Protec-  
22 tion Agency (in this Act referred to as the “Assistant Ad-  
23 ministrator”) shall establish a research and development  
24 program to promote water use efficiency and conservation,  
25 including—



1 (1) technologies and processes that enable the  
2 collection, treatment, and reuse of rainwater and  
3 greywater;

4 (2) water storage and distribution systems; and

5 (3) behavioral, social, and economic barriers to  
6 achieving greater water use efficiency.

7 (b) CONSIDERATIONS.—In planning and imple-  
8 menting the program the Assistant Administrator shall  
9 consider—

10 (1) research needs identified by water resource  
11 managers, State and local governments, and other  
12 interested parties; and

13 (2) technologies and processes likely to achieve  
14 the greatest increases in water use efficiency.

15 **SEC. 4. TECHNOLOGY TRANSFER.**

16 The Assistant Administrator, building on the results  
17 of the activities of the program established under section  
18 3, shall—

19 (1) facilitate the adoption of technology and  
20 processes to increase water use, water efficiency, and  
21 conservation; and

22 (2) collect and disseminate information on tech-  
23 nologies and processes to increase water use and  
24 conservation, including information on—

1 (A) incentives and impediments to develop-  
2 ment and commercialization;

3 (B) best practices; and

4 (C) anticipated increases in water use effi-  
5 ciency resulting from the implementation of  
6 specific technologies and processes.

7 **SEC. 5. REPORT.**

8 Not later than 18 months after the date of enactment  
9 of this Act, and once every 2 years thereafter, the Assist-  
10 ant Administrator shall transmit to Congress a report  
11 which details the progress being made by the Environ-  
12 mental Protection Agency with regard to—

13 (1) research projects initiated by the Agency;

14 and

15 (2) outreach and communication activities con-  
16 ducted by the Agency.

17 **SEC. 6. AUTHORIZATION OF APPROPRIATIONS.**

18 There are authorized to be appropriated to the As-  
19 sistant Administrator for carrying out this Act such sums  
20 as may be necessary for each of the fiscal years 2009  
21 through 2013.

○

SECTION-BY-SECTION ANALYSIS OF H.R. 3957,  
WATER USE EFFICIENCY AND CONSERVATION RESEARCH ACT

Purpose: To increase research, development, education, and technology transfer activities related to water use efficiency and conservation technologies and practices at the Environmental Protection Agency (EPA).

**Section 1: Short Title**

The “Water Use Efficiency and Conservation Research Act”.

**Section 2: Findings**

Section 2 includes the Congressional findings and defines the need for expanding the scope of research and development conducted by the Environmental Protection agency to include water use efficiency and conservation to address the problems of increasing water shortages across the country.

**Section 3: Research Program**

Section 3 directs the Assistant Administrator to establish a research, development, and demonstration program within the Environmental Protection Agency’s Office of Research and Development to promote water use efficiency and conservation. The bill provides examples of several areas the program should address including water storage and distribution systems; and behavioral, social, and economic barriers to achieving greater water use efficiency. In addition, the bill states the program should research technologies and processes that enable the collection, treatment, and reuse of rainwater and greywater. The specific projects selected for funding through the program should reflect the needs identified by local and State water managers.

**Section 4: Technology Transfer**

Section 4 directs the Assistant Administrator to collect and disseminate information on current water use efficient and conservation technologies and practices to facilitate their adoption. This information should include incentives and impediments to development and commercialization, best practices, and anticipated increases in water use efficiency resulting from the implementation of these processes.

**Section 5: Report**

Section 5 directs the Assistant Administrator to report to Congress on the progress being made by the Environmental Protection Agency with regard to the research projects initiated, and the outreach and communication activities conducted through the program.

**Section 6: Authorization of Appropriations**

Section 6 provides a five-year authorization of the program with such sums as necessary to carry out the program.

**COMMITTEE ON SCIENCE AND TECHNOLOGY  
FULL COMMITTEE MARKUP  
JULY 16, 2008**

**AMENDMENT ROSTER**

*H.R. 3957, the Water Use Efficiency and Conservation Research Act*

No.	Sponsor	Description	Results
1	Mr. Matheson	Manager's amendment makes technical corrections to the bill and adds a section requiring four water efficiency technology projects in residential and commercial buildings.	Agreed to by voice vote.
2.	Ms. Johnson	Amendment establishes a publicly-accessible clearinghouse on technologies and processes to promote water use efficiency and conservation; expands the program to include watershed water efficiency planning; and allows EPA to allocate extramural grants to institutions of higher education.	Agreed to by voice vote.
3.	Mr. Gingrey	Adds a new section requiring EPA to create a strategic plan related to water use efficiency and conservation.	Agreed to by voice vote.
4.	Ms. Giffords	Adds a new section directing the Environmental Protection Agency to work with the National Academies to investigate and report on water strategies for the management of water supply, wastewater, and stormwater.	Agreed to by voice vote.

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**AMENDMENT TO H.R. 3957**  
**OFFERED BY MR. MATHESON OF UTAH**

Page 4, line 20, strike “increase water use, water efficiency,” and insert “promote water use efficiency”.

Page 5, lines 7 and 17, redesignate sections 5 and 6 as sections 6 and 7, respectively.

Page 5, after line 6, insert the following new section:

**1 SEC. 5. ADVANCED WATER EFFICIENCY DEVELOPMENT**  
**2 PROJECTS.**

**3** (a) IN GENERAL.—As part of the program under sec-  
**4** tion 3, the Assistant Administrator shall carry out at least  
**5** 4 projects under which the funding is provided for the in-  
**6** corporation into a building of the latest water use effi-  
**7** ciency and conservation technologies and designs. Funding  
**8** for each project shall be provided only to cover incremental  
**9** costs of water-use efficiency and conservation technologies.

**10** (b) CRITERIA.—Of the 4 projects described in sub-  
**11** section (a), at least 1 shall be for a residential building  
**12** and at least 1 shall be for a commercial building.

**13** (c) PUBLIC AVAILABILITY.—The designs of buildings  
**14** with respect to which funding is provided under subsection  
**15** (a) shall be made available to the public, and such build-

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1 ings shall be accessible to the public for tours and edu-  
 2 cational purposes.

Page 5, line 14, strike “and”.

Page 5, after line 14, insert the following new para-  
 graph:

3 (2) development projects initiated by the Agen-  
 4 cy; and

Page 5, line 15, strike “(2)” and insert “(3)”.

Page 5, lines 17 through 21, amend section 7 (as so  
 redesignated by this amendment) to read as follows:

5 **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

6 There are authorized to be appropriated to the As-  
 7 sistant Administrator for carrying out this Act  
 8 \$20,000,000 for each of the fiscal years 2009 through  
 9 2013.



**AMENDMENT TO H.R. 3957**  
**OFFERED BY MS. EDDIE BERNICE JOHNSON OF**  
**TEXAS**

Page 4, beginning on line 2, strike “treatment” and all that follows through the semicolon on line 3 and insert “storage, treatment, and reuse of rainwater, stormwater, and greywater;”.

Page 4, line 4, strike “and” after the semicolon.

Page 4, line 6, strike the period at the end and insert “and conservation; and”.

Page 4, after line 6, insert the following:

- 1           (4) use of watershed planning directed toward
- 2           water quality, conservation, and supply.

Page 4, line 14, strike the period at the end and insert “and conservation.”.

Page 4, after line 14, insert the following new subsection:

- 3           (c) MINORITY SERVING INSTITUTIONS.—In the exe-
- 4           cution of this program, the Assistant Administrator may
- 5           award extramural grants to institutions of higher edu-

1 cation and shall encourage participation by Minority Serv-  
2 ing Institutions.

Page 4, strike lines 22 through 24 and insert the  
following:

3 (2) collect and disseminate information, includ-  
4 ing the establishment of a publicly-accessible clear-  
5 inghouse, on technologies and processes to promote  
6 water use efficiency and conservation, including in-  
7 formation on—

Page 5, line 5, strike “resulting” and insert “and  
conservation resulting”.

Page 5, line 13, strike “research” and insert “water  
use efficiency and conservation research”.

Page 5, line 16, strike the period at the end and in-  
sert “concerning water use efficiency and conservation.”





**AMENDMENT TO H.R. 3957**  
**OFFERED BY MR. GINGREY OF GEORGIA**

Page 4, after line 14, insert the following new section (and redesignate subsequent sections and make necessary conforming changes accordingly):

**1 SEC. 4. STRATEGIC RESEARCH PLAN.**

2 (a) IN GENERAL.—The Assistant Administrator shall  
 3 coordinate the development of a strategic research plan  
 4 (in this Act referred to as the “plan”) for the water use  
 5 efficiency and conservation research and development pro-  
 6 gram established in section 3 with [REDACTED] all  
 7 other Environmental Protection Agency research and de-  
 8 velopment strategic plans.

9 (b) PLAN CONTENTS.—The plan shall—

10 (1) outline research goals and priorities for a  
 11 water use efficiency and conservation research agen-  
 12 da, including—

13 (A) developing innovative water supply-en-  
 14 hancing processes and technologies; and

15 (B) improving existing processes and tech-  
 16 nologies, including wastewater treatment, desa-  
 17 linization, and groundwater recharge and recov-  
 18 ery schemes;

1 (2) identify current Federal research efforts on  
2 water that are directed toward meeting the goals of  
3 improving water use efficiency, water conservation,  
4 or expanding water supply and describe how such ef-  
5 forts are coordinated with the program established  
6 in section 3 in order to leverage resources and avoid  
7 duplication; and

8 (3) consider and utilize, as appropriate, rec-  
9 ommendations in reports and studies conducted by  
10 Federal agencies, the National Research Council, the  
11 National Science and Technology Council, or other  
12 entities in the development of the plan.

13 (c) SCIENCE ADVISORY BOARD REVIEW.—The As-  
14 sistant Administrator shall submit the plan to the Science  
15 Advisory Board of the Environmental Protection Agency  
16 for review.

17 (d) REVISION.—The plan shall be revised and amend-  
18 ed as needed to reflect current scientific findings and na-  
19 tional research priorities.

Page 3, line 24, strike “to promote” and insert  
“consistent with the plan developed under section 4 that  
promotes”.

Page 5, after line 16, add the following new para-  
graph (and make technical and conforming changes as  
necessary):

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1 (3) development and implementation of the  
2 plan.



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**AMENDMENT TO H.R. 3957**  
**OFFERED BY MS. GIFFORDS OF ARIZONA**

Page 5, after line 16, insert the following new section:

1 **SEC. 6. WATER MANAGEMENT STUDY AND REPORT.**

2 (a) STUDY.—

3 (1) REQUIREMENT.—The Administrator of the  
4 Environmental Protection Agency shall enter into an  
5 arrangement with the National Academy of Sciences  
6 to complete a study of low impact and soft path  
7 strategies for management of water supply, waste-  
8 water, and stormwater.

9 (2) CONTENTS.—The study shall—

10 (A) examine and compare the state of re-  
11 search, technology development, and emerging  
12 practices in other developed and developing  
13 countries with those in the United States;

14 (B) identify and evaluate relevant system  
15 approaches for comprehensive water manage-  
16 ment, including the interrelationship of water  
17 systems with other major systems such as en-  
18 ergy and transportation;

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1 (C) identify priority research and develop-  
2 ment needs; and

3 (D) assess implementation needs and bar-  
4 riers.

5 (b) REPORT.—Not later than 2 years after the date  
6 of enactment of this Act, the Administrator of the Envi-  
7 ronmental Protection Agency shall transmit to the Com-  
8 mittee on Science and Technology of the House of Rep-  
9 resentatives and the Committee on Environment and Pub-  
10 lic Works of the Senate a report on the key findings of  
11 the study conducted under subsection (a). The report shall  
12 evaluate challenges and opportunities and serve as a prac-  
13 tical reference for water managers, planners, developers,  
14 scientists, engineers, non-governmental organizations, fed-  
15 eral agencies, and regulators by recommending innovative  
16 and integrated solutions.

17 (c) DEFINITIONS.—For purposes of this section—

18 (1) the term “low impact” means a strategy  
19 that manages rainfall at the source using uniformly  
20 distributed decentralized micro-scale controls to  
21 mimic a site’s predevelopment hydrology by using  
22 design techniques that infiltrate, filter, store, evapo-  
23 rate, and detain runoff close to its source; and

24 (2) the term “soft path” means a general  
25 framework that encompasses—

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- 1 (A) increased efficiency of water use;
- 2 (B) integration of water supply, waste-
- 3 water treatment, and stormwater management
- 4 systems; and
- 5 (C) protection, restoration, and effective
- 6 use of the natural capacities of ecosystems to
- 7 provide clean water.
- 8 (d) AUTHORIZATION OF APPROPRIATIONS.—There
- 9 are authorized to be appropriated to the Administrator of
- 10 the Environmental Protection Agency for carrying out this
- 11 section \$1,000,000 for fiscal year 2009.

Page 5, line 17, redesignate section 6 as section 7.

## XXIII. EXCHANGE OF LETTERS

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,  
*Washington, DC, July 22, 2008.*

Hon. BART GORDON,  
*Chairman, Committee on Science and Technology,  
House of Representatives, Washington, DC.*

DEAR CHAIRMAN GORDON: I write to you regarding H.R. 3957, the "Water Use Efficiency and Conservation Research Act." This legislation authorizes the Environmental Protection Agency to establish a research and development program to promote water use efficiency and conservation technologies and practices.

H.R. 3957 contains provisions that fall within the jurisdiction of the Committee on Transportation and Infrastructure. I recognize and appreciate your desire to bring this legislation before the House in an expeditious manner and, accordingly, I will not seek a sequential referral of the bill. However, I agree to waive consideration of this bill with the mutual understanding that my decision to forego a sequential referral of the bill does not waive, reduce, or otherwise affect the jurisdiction of the Committee on Transportation and Infrastructure over H.R. 3957.

Further, the Committee on Transportation and Infrastructure reserves the right to seek the appointment of conferees during any House-Senate conference convened on this legislation on provisions of the bill that are within the Committee's jurisdiction. I ask for your commitment to support any request by the Committee on Transportation and Infrastructure for the appointment of conferees on H.R. 3957 or similar legislation.

Please place a copy of this letter and your response acknowledging the Committee on Transportation and Infrastructure's jurisdictional interest in the Committee Report on H.R. 3957 and in the Congressional Record during consideration of the measure on the House Floor.

I look forward to working with you as we prepare to pass this important legislation,

Sincerely,

JAMES L. OBERSTAR,  
*Chairman.*

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HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE AND TECHNOLOGY,  
*Washington, DC, July 22, 2008.*

Hon. JAMES L. OBERSTAR,  
*Chairman, Committee on Transportation and Infrastructure,  
House of Representatives, Washington, DC.*

DEAR CHAIRMAN OBERSTAR: Thank you for your July 22, 2008 letter regarding H.R. 3957, the Water Use Efficiency and Conservation Research Act. Your support for this legislation and your assistance in ensuring its timely consideration are greatly appreciated.

I agree that provisions in the bill are of jurisdictional interest to the Committee on Transportation and Infrastructure. I acknowledge that by forgoing a sequential referral, your Committee is not

relinquishing its jurisdiction and I will fully support your request to be represented in a House-Senate conference on those provisions over which the Committee on Transportation and Infrastructure has jurisdiction in H.R. 3957. A copy of our letters will be placed in the Committee Report on H.R. 3957 and in the Congressional Record during consideration of the bill on the House floor.

I value your cooperation and look forward to working with you as we move ahead with this important legislation.

Sincerely,

BART GORDON,  
*Chairman.*

